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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,287	09/12/2000	Paul C. Weaver	8932-146	6504

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EXAMINER

ROBERT, EDUARDO C

ART UNIT	PAPER NUMBER
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3732

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DATE MAILED: 12/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/660,287

Applicant(s)

WEAVER ET AL.

Examiner

Eduardo C. Robert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-21 and 23 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 22 is/are rejected.
- 7) ☒ Claim(s) 12-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Gotfried (Reference "AE" on PTO-1449).

Gotfried discloses a system comprising a plate I (see Figure 2) having an upper surface, a bone contacting surface, at least one first hole, e.g. 5, passing through the upper and bone contacting surface and having a thread (see Figure 1 and 2), and at least one non-threaded second hole, e.g. 7, passing through the upper and bone contacting surfaces (see Figure 1 and 2). The system includes screws with a threaded shaft and threaded head to mate with the first hole (see Figures 7 and 10). The system also includes screws with threaded shaft and non-threaded head to

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mate with the second holes (see Figure 10). The screws remain seated in their respective holes for substantially as long the plate is implanted.

Claims 1-3, 9, 10, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Bono, et al.

Bono, et al. disclose a system comprising a plate 50 having an upper surface, a bone contacting surface, at least one first hole, e.g. 58, passing through the upper and bone contacting surface and having a thread, and at least one non-threaded second hole, e.g. 59, passing through the upper and bone contacting surfaces (see Figure 2). The system includes self-tapping screws with a threaded shaft and threaded head to mate with the first hole (see Figure 2). The system also includes screws with threaded shaft and non-threaded head to mate with the second holes (see col. 5, lines 5-12). The screws remain seated in their respective holes for substantially as long the plate is implanted. The plate appears to have a trapezoidal shaped cross-section between the holes. The non-threaded holes are longitudinally elongated and have an edge inclined at an angle to the upper surface (see Figure 2).

Applicant is reminded that an anticipation under 35 U.S.C. 102(b) or 102(e) is established when a single prior art reference discloses, either expressly or under principles of inherency, each and every element of a claimed invention. *RCA Corp. v. Applied Digital Data System, Inc.*, 730 F.2d 1440, 221 USPQ 385 (Fed. Cir. 1984). Furthermore, it is well settled that the law of anticipation does not required that the reference teach what appellant is teaching or has disclosed, but only that the claims on appeal "read on" something disclosed in the reference, i.e. all limitation of the claims are found in the reference. *Kalman v. Kimberly Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1083). Moreover, it is not necessary for the applied reference to

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expressly disclose or describe a particular element or limitation of a rejected claim word for word as in the rejected claim so long as the reference inherently discloses that element or limitation. *Standard Havens Products Inc. v. Gencor Industries Inc.*, 953 F.2d 1360, 21 USPQ 2d. 1321 (Fed. Cir. 1991).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotfried (Reference "AE" on PTO-1449) in view of Decoste (Reference "AH" on PTO-1449).

Gotfried discloses the claimed invention except for the screws being self-tapping, self-drilling and cannulated. Decoste teaches to make bone screw self-tapping, self-drilling and cannulated in order to minimize or eliminate the danger of thermal necrosis and facilitate the insertion and removal of the screw into the bone (see col. 1, lines 5-12 and col. 1, line 35 through col. 2, line 24). It would have been obvious to one skilled in the art at the time the invention was made to construct the system of Gotfried with the screws being self-tapping, self-drilling, and cannulated in view of Decoste, in order to minimize or eliminate the danger of thermal necrosis and facilitate the insertion and removal of the screw into the bone.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotfried (Reference "AE" on PTO-1449).

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Gotfried disclose the claimed invention except for the holes having a conical shape with double lead thread. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the system of Gotfried with the holes having a conical shape with double lead thread, since it is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious. In re Dailey and Eilers, 149 USPQ 47 (1966).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gotfried (Reference "AE" on PTO-1449) in view of Klaue (Reference "AL" on PTO-1449).

Gotfried discloses the claimed invention except for the plate having a trapezoidal shaped cross-section. Klaue teaches to make bone plates with trapezoidal shaped cross-section in order to improved blood circulation in the bone (see col. 1, lines 40-45). It would have been obvious to one skilled in the art at the time the invention was made to construct the system of Gotfried with the plate having a trapezoidal shaped cross-section in view of Klaue, in order to improved blood circulation in the bone.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bono, et al. in view of Decoste (Reference "AH" on PTO-1449).

Bono, et al. disclose the claimed invention except for the screws being self-drilling and cannulated and the non-threaded screws being self-tapping. Decoste teaches to make bone screw self-tapping, self-drilling and cannulated in order to minimize or eliminate the danger of thermal necrosis and facilitate the insertion and removal of the screw into the bone (see col. 1, lines 5-12 and col. 1, line 35 through col. 2, line 24). It would have been obvious to one skilled in the art at the time the invention was made to construct the system of Bono, et al. with the screws being

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self-tapping, self-drilling, and cannulated in view of Decoste, in order to minimize or eliminate the danger of thermal necrosis and facilitate the insertion and removal of the screw into the bone.

Claims 7, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bono, et al.

Bono, et al. disclose the claimed invention except for the holes having a conical shape with double lead thread. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the system of Bono, et al. with the holes having a conical shape with double lead thread, since it is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious. In re Dailey and Eilers, 149 USPQ 47 (1966). With regard to claim 11, it would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the system of Bono, et al. the plate being shape to conform to a metaphysis of a bone and to a diaphysis of a bone, since it is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the intended use. In re Dailey and Eilers, 149 USPQ 47 (1966). Moreover, it is noted that it is well known in the art to shape bone plates with different forms depending on the intended use, e.g. the Patent to Reed (US Pat 5,968,047) clearly shows some of the different shapes a bone plate may take (see Figures 28a-28i).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

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***Allowable Subject Matter***

Claims 18-21 and 23 are allowed.

Claims 12-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Theken, et al. and Lowery, et al. are cited art of interest.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

The insertion of the new limitation that the second hole is non-threaded and the second screw head is not threaded necessitated the new grounds of rejection.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



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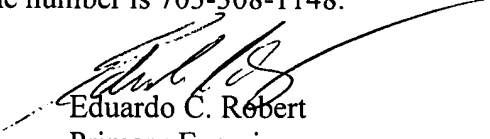
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo C. Robert whose telephone number is 703-305-7333.

The examiner can normally be reached on Monday-Friday, 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on 703-308-2582. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.



Eduardo C. Robert  
Primary Examiner  
Art Unit 3732

E.C. Robert  
December 19, 2002